CLAIMS:

1. A device for reducing the electromagnetic radiation of a wire-bound transmission system having dissymmetry and unshielded lines, provided for broadband communication and having a transmission path for a transmission signal, the device comprising means for measuring the dissymmetry of the network at a supply point, characterized in that the device comprises means for actively eliminating or reducing the asymmetric signal.

2. A device as claimed in claim 1, characterized in that the means for actively eliminating or reducing the asymmetric signal comprise a control circuit for changing the currently measured dissymmetry of the network.

3. A device as claimed in claim 1 or 2, characterized in that the control circuit comprises at least:

- a measuring head (1) for the asymmetrical common-mode current (I_cm) which flows between the phase (P) and neutral lines (N) and earth or the protective line (SL), and
- a summing point (3) for comparing the measured values of the asymmetrical common-mode current (I_cm) with the nominal value for the asymmetrical current (I_cm, sp).

4. A device as claimed in any one of claims 1 to 3, characterized in that the means for actively eliminating or reducing the asymmetric signal comprise a controller (4) which is fed with the current transmission signal (Tx) and the output signal (I_diff) of the summing point (3) and computes two output signals (AS1, AS2) in dependence upon the input signals (Tx, I_diff).

5. A device as claimed in any one of claims 1 to 4, characterized in that it is suitable for generating two output signals (AS1, AS2) having an artificial dissymmetry.

6. A device as claimed in any one of claims 1 to 5, characterized in that the wire-bound transmission system is constructed with unshielded lines consisting of communication lines, electric installation lines or power supply lines.

7. A method of reducing the electromagnetic radiation of a wire-bound transmission system having dissymmetry and unshielded lines, which radiation is produced when data having a frequency above the mains frequency are transmitted, characterized in that, in the method, the current dissymmetry of the network is measured and two output signals (AS1, AS2) having an artificial dissymmetry which is complementary to that of the network are generated from the transmission signal (Tx).

8. A method as claimed in claim 7, characterized in that the secondary side of a first mains coupling device (10) conveys a first mains coupling voltage (U_NK1) which corresponds to the differential-mode voltage (U_dm) between the phase (P) and the neutral line (N), multiplied by the factor (a), and in that the secondary side of a second mains coupling device conveys a second mains coupling voltage (U_NK2) which corresponds to the differential-mode voltage (U_dm) between the phase (P) and the neutral line (N), multiplied by the factor (1-a).

9. A method as claimed in claim 7 or 8, characterized in that it comprises the steps of

- measuring the current dissymmetry of the network,
- comparing the measured dissymmetry with a nominal value,
- supplying the result of the comparison to a controller (4),
- computing two output signals (AS1, AS2) of the controller (4) in dependence upon the result of the comparison (I_diff) and a supplied transmission signal (Tx),
- controlling a first adjusting element (7) of a first transmitter (5) in accordance with the first output signal (AS1),
- controlling the second adjusting element (11) of a second transmitter (6) in accordance with the second output signal (AS2), and
- coupling the divided differential-mode voltage (U_dm) generated by the control into the network.

10. Use of a device as claimed in any one of claims 1 to 6 for a transmission modem.